DOCUMENT RESUME

ED 475 010 EA 032 461

AUTHOR Rudo, Zena H.

TITLE Resource Allocation and Improved Student Performance:

Teachers' Perspectives on School Finance Administration.

PUB DATE 2002-10-19

NOTE 9p.; Paper presented at the Mid-Western Educational Research

Association Annual Meeting (Columbus, OH, October 19, 2002).

PUB TYPE Reports - Research (143) -- Speeches/Meeting Papers (150)

EDRS PRICE EDRS Price MF01/PC01 Plus Postage.

DESCRIPTORS *Academic Achievement; *Educational Finance; *Educational

Improvement; Elementary Secondary Education; Money
Management; Perspective Taking; *Resource Allocation;

*Teacher Attitudes; Teacher Surveys

IDENTIFIERS Arkansas; Louisiana; New Mexico; Texas

ABSTRACT

As expectations rise for students to perform at higher levels, the question of how best to support student performance through resources becomes paramount. In determining new ways to better allocate resources, administrators must consider teacher input on what has/has not been effective in supporting increased student performance. Teachers (N=1,701) responded to a survey on effective resource-allocation practices and barriers to support student success in their schools and districts. Survey results imply that teachers are aware of how resources are allocated at both the school site and district level to improve student performance and appreciate opportunities to share their knowledge. Results also indicate that schools and districts implement innovative practices, such as increased technology, special instructional programs, and staff development, but not necessarily increased staffing allocations. Although reported innovations have been somewhat effective for all students, a number of barriers continue to limit how much improvement is achieved. The results help further the dialogue on how spending relates to student success and validate the use of a systemic approach to resource allocation. The study's focus on district and school resource-allocation practices within a state context provides a regional perspective pursued in relatively few studies on resource allocation. (Contains 6 tables.) (RT)



Resource Allocation and Improved Student Performance: Teachers' Perspectives on School Finance Administration.

Zena H. Rudo Lotte Smith-Hansen

October 19, 2002

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION
CENTER (ERIC)

This document has been reproduced as received from the person or organization originating it.

- Minor changes have been made to improve reproduction quality
- Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY

Z. Rudo

TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

1

BEST COPY AVAILABLE



Resource Allocation and Improved Student Performance:
Teachers' Perspectives on School Finance Administration
Zena H. Rudo, Ph.D.
Southwestern Educational Development Laboratory
Lotte Smith-Hansen, B.A.
Charles A. Dana Center, University of Texas at Austin

Mid-Western Educational Research Association Annual Meeting October 19, 2002 Columbus, Ohio

Abstract

As expectations rise for students to perform at higher levels, the question of how best to support this through resources becomes paramount. In determining new ways to better allocate resources, administrators must consider teacher input on what has/has not been effective in supporting increased student performance. Teachers (N=1,701) responded to a survey on effective resource allocation practices and barriers to support student success in their school and district. Results indicate schools and districts implement innovative practices such as increased technology, special instructional programs, and staff development, but not necessarily increased staffing allocations. Although the reported innovations have been somewhat effective for all students, a number of barriers continue to impact how much improvement is achieved. The results help further the dialogue on how spending relates to student success and validates the use of a systemic approach to resource allocation.

Problem Statement

This year, America's public school districts will spend more than \$350 billion to educate the nation's children. Policymakers, educators, researchers, and the general public want to know how these resources can be allocated effectively and efficiently to guarantee the success of all students. As expectations rise for students and teachers to perform at higher levels, the question of how best to support this reform through fiscal measures becomes even more critical.

New federal goals for all students to reach proficient or higher levels of performance will require better approaches to allocating resources for teaching and learning. In determining new ways to better allocate resources, administrators must consider teacher input on what has or has not been effective in supporting higher levels of student performance.

The complexity of resource allocation issues require researchers to search for ways to validate findings and ground them in local experience in order for results to be useful in guiding education spending. Researchers face the additional challenge of translating research findings to generalizable conclusions that 1) are relevant to and supportive of state and local education policymaking, 2) consider a systemic approach to improving student performance, and 3) incorporate an understanding of the challenges and innovations that currently exist in local practice.



This paper describes SEDL's recent study that examined resource allocation in relation to student performance in public school districts in which mixed methodologies were used to analyze state, district, and campus level data. Details of the findings from teachers describing effective resource allocation practices, as well as barriers and challenges, to improve student performance are provided. Implications of the study are briefly described to support state and local education policy decisions.

Methodology

Researchers examined resource allocation and student performance from 1995-2000 in public school districts in Arkansas, Louisiana, New Mexico, and Texas. Twelve school districts, representative of the region, that exhibited consistent improvement in performance over time were selected for more in-depth study. Three improvement districts in each state, demographically representative of their state, with enrollments of 800-1,999 (small); 2,000-10,000 (medium); and more than 10,000 (large) students were selected. Researchers distributed surveys to instructional staff in the 12 improvement districts (N=7,840) with the goal of gaining a broader, more complete picture of resource allocation practices at the school level. The perspective of teachers provided researchers with (1) a classroom view of effective practices and barriers/challenges regarding district resource allocation, (2) teacher opinions regarding the ways their schools and districts allocate resources to support student achievement improvement, and (3) additional data to triangulate findings from interviews and focus groups with campus and district administrators and from analysis of existing data sets (district level fiscal data from NCES Common Core of Data, performance data from state departments of education).

Researchers developed a survey form to solicit both quantitative and qualitative information, including open-ended, forced choice, and Likert scale questions. Individuals with classroom teaching experience who were not part of the study piloted the survey, as did teachers in a pilot district. Surveys were disseminated with assistance from district staff in each improvement district. Attached to each survey was a self-addressed, postage-paid envelope respondents used to return their surveys. Quantitative analysis of the close-ended survey responses, using SPSS software, included descriptive statistics, i.e., frequencies, percentages and cross-district comparisons by demographic variables. A qualitative analysis of open-ended responses resulted in common themes found among the survey respondents within and across districts.

Results

Researchers eliminated responses from those who did not identify themselves as teachers in order to focus the analysis on the perspectives of individuals with direct teaching experience. Analysis of results from all respondents indicated that there was little difference in response means from the teachers (92%) and the "other instructional staff" (8%), suggesting that omitting other instructional staff would not significantly skew the results. A breakdown of the teacher respondents (n = 1,701) from each improvement district appears in Table 1.

Most teachers (74.6%) had five or more years of teaching experience, while only 7.3% were first-year teachers. More than half of the teachers reported that all students in their schools had made at least some progress in student performance over the previous five years, whereas 36.8% reported only some students had made progress (see Table 2).



Table 1. Teacher respondents by improvement district

	District	Number of	Percent of		District	Number of	Percent of
State	size	teachers	teachers	State	size	teachers	teachers
AR	Small	45	2.6	NM	Small	31	1.9
	Medium	62	3.6		Medium	171	10.1
	Large	273	16.0		Large	264	15.5
LA	Small	51	3.0	TX	Small	66	3.9
	Medium	89	5.2		Medium	100	5.9
	Large	328	19.3		Large	219	12.9

Table 2. Teacher perception of overall student improvement in previous five years

•	Arkansas	Louisiana	New Mexico	Texas	All
	teachers	teachers	teachers	teachers	teachers
Responses		Percer	nt of teachers rep	orting	
Much improvement	9.9	18.8	17.4	37.6	20.9
for all students					
Some improvement	37.4	34.3	32.0	22.9	31.6
for all students					
Much improvement	18	14.7	17.4	16.3	16.6
for some students					
Some improvement	27.2	22.2	19.7	12.1	20.3
for some students					
No improvement	0.3	1.5	1.3	0.3	0.9
Unsure	7.3	8.6	12.2	10.8	9.7

General Allocation and Influencing Factors

Teachers were asked about the ways that resources are allocated and the factors that influence allocation in their districts and schools. Eighty-five percent of respondents agree or strongly agree that their district often engages in or attempts innovative practices to improve student performance. Fewer (63.5%) agree district resources are aligned with school needs, while slightly more (66.9%) believe that the district finds new ways to allocate existing resources to improve student performance. Over half of respondents (53.8%) report that the school district evaluates spending practices to make better decisions about resources (see Table 3). Teachers were in greater agreement about school allocation practices than district allocation practices. As Table 3 also shows, overwhelmingly teachers agree (95.2%) that instructional staff often engages in or attempts innovative practices to improve student performance. They also feel that new funds have been available to the school (77.5%), that the school finds new ways to allocate existing resources (83.7%), and that the school staff make use of data (test scores) to determine resource needs (86.1%).

The survey also asked respondents to rate how eight different factors influence resource allocation decisions at the district level. Responses ranged from influences "a great extent" to influences "not at all". Among the choices, laws and regulations influence resource allocation



decisions the most (see Table 4), although Texas and suburban teachers feel that this influences resource allocation to a lesser extent. District goals and priorities is also identified by teachers as having an important influence on resource allocation decisions; teachers in Arkansas and Texas are more likely to feel this factor is important. Fairness and equity factors and staffing needs exert the least influence, especially for New Mexico teachers.

Table 3. District and school resource allocation

	Agree	Agree	Disagree	Disagree
	strongly	somewhat	somewhat	strongly
District allocation	F	ercent of tea	chers report	ing
District often engages/attempts innovative	31.1	54.6	10.6	3.6
practices to improve student performance				
District resource allocation decisions are	10.6	53.9	24.5	11.1
aligned with school needs			•	
District finds new ways to allocate existing	16.8	50.1	26.2	6.9
resources to improve student performance				
District evaluates spending practices to	13.2	40.6	27.5	18.7
make better spending decisions				
School allocation	,			
Instructional staff often engages/attempts	53.1	42.1	4.0	.7
innovative practices to improve student				
performance				
New funds for resources have been	33.3	44.2	15.8	6.6
available in the past five years				
School finds new ways to allocate existing	33.9	49.8	13.5	2.8
resources to support student performance				
School staff use data to determine resource	44.8	41.3	10.7	3.3
needs to improve student performance				

Table 4. Factors that influence the allocation of resources

	Great	Some	Very	
	Extent	Extent	Little	Not at All
Factors		Percent of tea	chers reporting	
School characteristics (a)	40.4	44.8	10.6	4.2
School type (b)	29.7	53.8	13.4	3.2
Student needs	22.3	51.4	22.0	4.3
Staffing needs	13.3	46.4	31.7	8.7
Laws and regulations	48.3	40.5	9.2	2.0
District goals and priorities	43.0	45.8	9.4	1.8
Fairness and equity	13.4	44.3	30.0	12.3
Availability or lack of funds	32.2	47.0	16.1	4.6

⁽a) location, population, enrollment



⁽b) grades served and specialty services such as magnet schools or alternative programs

Allocation Practices to Support Improved Student Performance

Teachers were asked to identify resource allocation practices that their school and district implemented that were effective (i.e. practices resulted in improved student achievement). The vast majority agreed that instructional staff at their schools and their districts often engage in or attempt innovative practices to improve student performance. Resource allocation at the school level is focused primarily on increased access to computer technology (78.4%), increased special instructional programs (65.8%), more professional development for teachers (57.7%), improved programs and services for at-risk students (54.3%), and provision of needed materials or equipment (52.7%). Teachers were less often able to identify district-wide resource strategies that resulted in student improvement; however, they acknowledged increased access to computer technology (68.0%) and more professional development for teachers (52.9%) as the two most common district-wide strategies implemented (see Table 5).

Table 5. Effective resource strategies in improving student improvement

	Scope of imp	lementation
	School level	District-wide
Resource Strategy	Percent of teac	hers reporting
Increased access to computer technology	78.4	68.0
Increased special instructional programs (a)	65.8	42.3
Provided more professional development for teachers	57.7	52.9
Improved programs and services for at-risk students (b)	54.3	45.3
Provided needed school materials or equipment	52.7	27.6
Reduced class sizes	39.3	30.2
Improved building facilities or maintenance	37.0	29.0
Increased planning time for teachers	24.9	15.7
Increased use of classroom aides	18.0	7.8
Reduced class loads	13.1	9.6
Increased teachers with more experience or higher degrees	10.7	10.1
Unsure	3.6	3.9

- (a) reading, mentoring/tutoring, English language, etc.
- (b) special education, English language learners, drop-out, etc.

Descriptive analysis of state groups of respondents reveals that overall, teachers in Louisiana indicated that their school has implemented more strategies to support student performance improvement. Louisiana teachers were more likely to indicate implementations of improved programs and services to at-risk students, provision of materials and equipment, and more professional development at the school and district level. New Mexico teachers indicated that schools implemented the least number of strategies. Schools in New Mexico were least likely to provide needed materials and equipment, and professional development; districts were less likely to provide programs/services for at risk students, special instructional programs, and professional development.

Further analysis reveals that suburban teachers feel their schools have implemented more strategies than those in urban and rural districts, especially improved programs and services for



at-risk students and more professional development. In general suburban and urban teachers were more likely to say that their school has implemented more professional development, while rural teachers were more likely to indicate that the district has provided more professional development. Teachers from small district, compared to those in medium and large districts, responded that their schools have implemented more strategies, including reduced class size, provision of materials and equipment, and more professional development.

Allocation Barriers and Challenges

Nearly one-half or more respondents noted these barriers and challenges: large class sizes, lack of competitive salaries, and limited planning time for teachers. About one-third of teachers identified limited school materials or equipment, ineffective state policies and mandates, and large class loads as barriers or challenges. Least likely to be identified as a barrier or challenge was limited access to student data, insufficient professional development, lack of experienced teachers, lack of leadership at the school level, and lack of special instructional programs (see Table 6). The majority of teachers in Arkansas, Louisiana, and New Mexico responded that large class size was a barrier to improving student performance. More than sixty percent of teachers in Louisiana and New Mexico indicated that lack of competitive salaries was a barrier, while less than 40 percent of teachers in the other two states identified this barrier. More than 50% of Arkansas and New Mexico teachers also indicated that limited planning time for teachers was a challenge to improving student performance. New Mexico teachers were also more likely to identify more barriers, including: limited school materials or equipment, ineffective state policies (along with Arkansas teachers), large class loads (along with Louisiana teachers), ineffective district policies and mandates, limited access to computer technology, and insufficient professional development.

Table 6. Barriers and challenges to improving student performance

Barrier/Challenge	Percent of Teachers
Large class sizes	53.6
Lack of competitive salaries	49.9
Limited planning time for teachers	49.6
Limited school materials or equipment	36.1
Ineffective state policies and mandates	32.8
Large class loads	32.5
Ineffective district policies and mandates	29.6
Limited access to computer technology	29.0
Insufficient programs and services for at-risk	26.1
Poor building facilities or maintenance	23.1
Lack of community resources	22.0
Lack of special instructional programs	18.4
Lack of leadership at the school level	18.3
Lack of experienced teachers	17.9
Insufficient professional development	14.2
Limited access to student data	7.1
Unsure	10.8



Conclusions and Implications

Overall, improvement district teachers see their district and individual schools making positive reforms in resource allocation. More experienced teachers with a longitudinal perspective of allocation practices see less school and district allocation practices implemented to improve student performance than first year teachers. At the same time they perceive more barriers and challenges that they must face than their less experienced colleagues. The predominant practices that most agree have supported student performance improvement are increased technology, special instructional programs, and staff development. Most do not see as much reform in staffing allocations, such as increased use of classroom aides and teachers with more experience or higher degrees. Large class sizes, a lack of competitive salaries, and limited planning time are their greatest barriers. In a time of increased equity lawsuits, the majority of the teachers do not perceive that fairness and equity exert as much influence on allocation decisions as laws and regulations and district goals and priorities.

The study results imply that teachers are aware of how resources are being allocated at both the school site and district level to improve student performance and appreciate an opportunity to share their knowledge. Many teachers view that there have been a variety of effective allocation practices implemented; however, no one specific approach seems to increase student success for all. Although innovations have been somewhat effective for all students, a number of barriers and challenges continue to impact how much student performance improvement is achieved.

This study benefits education administrators, practitioners, policymakers, and researchers in addressing the link between resource allocation and student performance. The results help further the dialogue on how spending impacts student success and validates the understanding that using a systemic approach to resource allocation will best serve the success of students. More specifically, incorporating teacher perspectives in resource allocation decisions could be an important factor in achieving student performance improvements. Further, the study's focus on district and school resource allocation practices within a state context provides a regional perspective pursued in relatively few studies on resource allocation.





U.S. Department of Education

Office of Educational Research and Improvement (OERI) National Library of Education (NLE) Educational Resources Information Center (ERIC)



REPRODUCTION RELEASE

(Specific Document)

I. DOCUMENT IDENTIFICATION	l:	
Title: Resource Allocation	and Improved Student	- Performance:
Teachers' Perspectives	on School Finance Ad	luminotration
Author(s): Zena H Rudo +	Lotte Smith-Hansen	
Corporate Source:		Publication Date:
Southwest Educations	al Development Laborato	ey 11-19-2002
II. REPRODUCTION RELEASE:		
monthly abstract journal of the ERIC system, Rescielectronic media, and sold through the ERIC Docurelease is granted, one of the following notices is If permission is granted to reproduce and dissert of the page.	eminate the identified document, please CHECK ONE o	o users in microfiche, reproduced paper copy, and the source of each document, and, if reproduction
The sample sticker shown below will be sffixed to all Level 1 documents	The sample sticker shown below will be affixed to all Level 2A documents	The sample sticker shown below will be affixed to all Level 2B documents
PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE, AND IN ELECTRONIC MEDIA FOR ERIC COLLECTION SUBSCRIBERS ONLY, HAS BEEN GRANTED BY	PERMISSION TO REPRODUCE AND DISSEMINATE THIS MATERIAL IN MICROFICHE ONLY HAS BEEN GRANTED BY
	Sattle	Sart.
TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)	TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)
1	2A	2B
Level 1 ↑	Lovel 2A	Level 2B
Check here for Level 1 release, permitting reproduction and dissemination in microfiche or other ERIC archival media (e.g., electronic) and paper copy.	Check here for Level 2A release, permitting reproduction and dissemination in microfiche and in electronic media for ERIC archival collection subscribers only	Check here for Level 2B release, permitting reproduction and dissemination in microfiche only
Docu If permission to	ments will be processed as indicated provided reproduction quality perm reproduce is granted, but no box is checked, documents will be process	its. ed at Level 1.
I hereby grant to the Educations	I Beneumen Information Co. 4 (50)	

ant to the Educational Resources Information Center (ERIC) nonexclusive permission to reproduce and disseminate this

document as indicated above. Reproduction from the ERIC microfiche or electronic media by persons other than ERIC employees and its system contractors requires permission from the copyright holder. Exception is made for non-profit reproduction by libraries and other service agencies to satisfy information needs of educators in response to discrete inquines. Signature here, 🔫 please



Sign

III. DOCUMENT AVAILABILITY INFORMATION (FROM NON-ERIC SOURCE):

If permission to reproduce is not granted to ERIC, or, if you wish ERIC to cite the availability of the document from another source, please provide the following information regarding the availability of the document. (ERIC will not announce a document unless it is publicly available, and a dependable source can be specified. Contributors should also be aware that ERIC selection criteria are significantly more stringent for documents that cannot be made available through EDRS.)

Publisher/Distributor:	
Address:	
Price:	
the right to grant this reproduction release is held by som	SHT/REPRODUCTION RIGHTS HOLDER: neone other than the addressee, please provide the appropriate name and
the right to grant this reproduction release is held by son ddress:	
the right to grant this reproduction release is held by son ddress: Name:	
the right to grant this reproduction release is held by son ddress: Name:	

V. WHERE TO SEND THIS FORM:

Send this form to the following ERIC Clearinghouse:

ERIC CLEARINGHOUSE ON ASSESSMENT AND EVALUATION UNIVERSITY OF MARYLAND 1129 SHRIVER LAB COLLEGE PARK, MD 20742-5701

ATTN: ACQUISITIONS

However, if solicited by the ERIC Facility, or if making an unsolicited contribution to ERIC, return this form (and the document being

ERIC Processing and Reference Facility 4483-A Forbes Boulevard Lanham, Maryland 20706

> Telephone: 301-552-4200 Toll Free: 800-799-3742 FAX: 301-552-4700

e-mail: ericfac@inet.ed.gov WWW: http://ericfacility.org

